

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	CG-Docket No. 10-213
Advanced Communications Provisions of)	
the 2010 Accessibility Act)	DA-10-1029
)	
Comments)	

To: Commission

COMMENTS OF CONVO COMMUNICATIONS, LLC

Convo Communications, LLC (Convo) hereby submits its remarks to the Comments released on October 21, 2010 regarding the Advanced Communications provisions of the Twenty-First Century Communications and Video Accessibility Act of 2010 (“2010 AA”). Industry comments are being sought by the Consumer & Governmental Bureau and Wireless Communications Bureau, both within the Federal Communications Commission (“FCC” or “Commission”). The focus of the Comments sought center around establishing a regulatory framework for telecommunications industry efforts to ensure that their service delivery platform(s) and technological standards do not obstruct compliance with the communications accessibility goals of the 2010 AA.¹

Convo is a non-certified video relay service (VRS) provider. On September 18, 2009, Convo was registered as an Interexchange Carrier (IXC) within the State of Texas. On October 30, 2009, Convo submitted an application to the FCC to be certified as a VRS provider. The underlying mission of Convo Communications, which is wholly owned and managed by deaf and hard of hearing persons, is to provide functionally equivalent telephone relay interpreting

¹ Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. No. 111-260, 124 Stat. 2751 (2010) *See also*, Amendment of Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. 111-265, 124 Stat. 2795 (2010).

services between persons with hearing loss who sign and hearing persons who use voice communications.

As previously stated by Convo in its Comments filing to the 2010 Notice of Inquiry that was released on June 28, 2010 by the FCC, Convo has a corporate service and product philosophy driven by its goal of providing “the most functionally equivalent, consumer-driven telecommunications service available anywhere, anytime” in alignment with the paramount Americans with Disabilities Act goal of “[integrating] people with disabilities into the fabric of humanity in a way that preserves personal choice and personal independence”.²

Pursuant to the 2010 AA statutory provisions, the FCC must promulgate rules within one year of its passage.³ Convo respectfully submits its views so that appropriate and necessary regulations are implemented in a manner that best enables a quickly changing technological landscape consisting of users and providers to mutually arrive at *cost-effective and readily available functional equivalency solutions*. Convo intends to be a pioneer in encouraging the use of the “off-the-shelf” equipment (i.e. CPE) or programs to make VRS calls. Convo believes that is the ideal path the FCC is seeking ways. The use of off-the-shelf products or programs will minimize the cost to the over-all-cost of equipment for both providers and consumers. At the same time, Convo realizes the issue of interoperability among such products is a barrier and thus address this issue in the following comments.

I. The 2010 Accessibility Act and Interoperable Video Conferencing Services

As Convo is in the business of providing video relay services, the most pertinent applicability of the 2010 AA to Convo relates to its provision of interoperable video conferencing services. As noted by the FCC in its October 2, 2010 Comments Introduction, Section 104 of the Telecommunications Act of 1934, as amended⁴, has two pertinent new sections added by the

² See Comments of Convo Communications, LLC, CG-Docket 10-51, at 4 (Aug. 16, 2010) (“Convo NOI comments”).

³ See Section 716(e)(1) of the Communications Act, to be codified as 47 USC § 617(e)(1).

⁴ Pub. L. No. 111-260, § 104 (hereinafter “the Communications Act”).

2010 AA that builds on the policy objectives of Section 255 of the Communications Act⁵. Of particular importance to interoperable video conferencing service providers are the accessibility provisions of Sections 716 and and record keeping provisions of Sections 717. Convo comes into the light of Section 716(e) via the definitions of “advanced communications” and “interoperable video conferencing service” and further by virtue of Section 716(b)(1), which in pertinent part states: “...a provider of advanced communications services shall ensure that such services offered by such provider *in or affecting interstate commerce* are accessible to and usable by individuals with disabilities, unless the requirements of this subsection are not achievable.”⁶ As Convo is such an advanced communications provider engaged in or affecting interstate commerce, Convo welcomes the opportunity to provide viable and technologically effective accessible services within the spirit of the 2010 AA.

II. Accessibility Compliance by Interoperable Video Conferencing Providers

If one were to glean anything from the Congressional intent and the broad reach of the 2010 AA that clearly extends beyond the current stable of recognized TRS providers, one must arrive at the conclusion that this will be akin to “the building of Rome”, which cannot be built in a day nor through specific technologies that have been in the past developed for a closed community of users such as TTY telecommunications relay service. To put it in another perspective, anybody in this country can make a voice-based call from anywhere in this country (cell, pay phone, regular telephone set, and, even, PC or Mac) which indicates the voice standards have been established for hearing persons to make a telephone call from anywhere and be connected to other telephone users. For deaf or hard-of-hearing persons who sign and use a variety of “off-the-shelf” based video conference programs already out in the market (Skype, iChat, Adobe Flash-based, OOVOO, Yahoo video, etc.), they are not able to make point to point calls using different video conference programs; i.e., they cannot call using Yahoo Messenger to Adobe Flash user, etc.

⁵ 47 U.S.C. § 255; *See* 47 C.F.R. §§ 6.1 *et seq.*

⁶ *See* Section 716(b)(1) of the 2010 AA, to be codified at 47 U.S.C. § 716 (b)(1). The phrase “subject to this subsection” in 716 (b)(1) refers to subsection (e) of Section 716.

As the Commission seeks comments that will lead to proposed rules to implement the accessibility requirements of the 2010 AA, *Convo believes that the proper approach at this time is for the Commission to enact rules that guide industry participants along “principled” avenues of conduct*, a conceptual approach that will be further addressed below.

As a minimum consideration underlying this approach, Convo believes that users of advanced communications will be best served if the FCC did not regulate accessibility requirements by specific standards based on operational mandatory minimums, such as those now applicable to traditional TTY-based Telecommunications Relay Services. The rationale for that is simply that to adopt one video standard should not be limited to VRS, rather the standards should be used for industry wide applications; to take this path will require several due-process rulemaking efforts and periods of industry competition to arrive at an ideal video standard. The process itself will take time. Ideally, specific criteria for establishing accessibility compliance is desirable and some of the questions posed by the October 21 Comments seek answers that require consideration of specific criteria. However, the nature of Internet-based technologies, with their widely divergent options and specific user group needs being what they are, this further leads to questions whether an effective means of achieving access compliance and functional equivalency can be ensured by promulgating “specific criteria” rules *at this time*. Instead, one suggested approach is for the FCC to encourage or force the creation of a working group of industry leaders (Google, Apple, Adobe, Yahoo as well as a few VRS providers) to determine how to enable their video conferencing products to connect to each other.

Without going into exhaustive detail regarding all the Comments being sought by the FCC in the October 28th Comment, Convo would like to use as an example the challenges in addressing “achievable” in the context of Section 716 access obligations for its overall position on promulgating rules related to the 2010 AA. In Section II, 2, of the October 28th Comment document, the FCC asks two seemingly innocuous and, perhaps loaded questions related to achievability: “What does “reasonable effort and expense” mean in the context of providing access to advanced communications equipment and services?” and “What is the best way of evaluating the extent to which a service provider or manufacturer is offering a variety of

accessible services and equipment containing varying degrees of functionality and features, and offered at differing price points?”

Any meaningfully concrete answer to those questions is highly contingent on many factors, as Congress well noted in its language for Section 716(g). Such factors are, to name a few: the nature of the steps and costs to a provider of equipment or services, the resulting economic impact and technical obligations involved, as well as the extent to which accessibility features are available across the provider’s product lines at differing price points. The question that video conference industry may ask is whether it is more profitable to offer packaged services with their proprietary video phone products or to make products universally aligned to one video codec standard and be engaged in competition by offering varying features of service. While related to “achievable”, those factors do not differ in application quite much from what is “readily achievable” pursuant to Section 255. As noted by the FCC itself in one of its recent publications, it has not initiated any Section 255 enforcement actions that address how to enforce the “readily achievable” standard, largely due to the “complexities associated with making a determination as to whether it is readily achievable....”⁷

Convo strongly believes that an “achievability” standard of review is a moving target subject to the many considerations that companies must address when bringing products to market, one of the most problematic being related to the effort of keeping pace with technological advancements. For example, several early VRS industry entrants invested millions in developing proprietary video conferencing equipment for VRS users to access their VRS platforms, upon which additional millions were expended so as to have server and network management features that kept many VRS users unwittingly tied to those products. Some of this was technically necessary as the TRS industry was the earliest adopter of internet-based communications for a specific user group and followed the pattern of TTY TRS. While newer video codecs and hardware are becoming attractive to the larger Internet community, they emerged in ways VRS industry providers did not then (or even now) have the financial resources to move towards, much less develop alone. As a result of previous technological investments,

⁷ See Elizabeth Lyle, *A Giant Leap & A Big Deal: Delivering on the Promise of Equal Access to Broadband for People with Disabilities*, OBI Working Paper Series, Federal Communications Commission, Office of Strategic Planning and Policy Analysis (April 2010) (“Lyle Working Paper”)

these companies were very resistant to embrace clearly superior or more efficient means to ensure industry-wide interoperability and user independence. As a historical example, one of the founders of Convo identified the development of TTY interoperability standards for CPE and for provider networks. The consensus recommendation, albeit not fully realizing problem this will bring, was to adopt Baudot as a code signaling standard. As a result, nearly all TTY manufacturers adopted manufacturing processes around that standard and TRS providers' networks were then designed around it, which resulted in many inefficiencies and posed a barrier to progress for quite some time. This design approach for devices and networks kept out new entrants to the TRS market. This "modified Baudot code syndrome" still forces participating TRS providers to use outdated telephone network features that many telephone providers outside of TRS no longer use. It was not until the availability of many internet technologies that were independently developed for widespread use for persons who rely on TTYs and the few TTY-TRS providers to be able escape the "Baudot syndrome".

In the larger context of the October 28th Comment, Convo had previously pointed out in its Convo NOI comments that it is only recently that various off-the-shelf hardware and software applications that were originally designed for persons *without* disabilities have found relatively growing use among those in the community of persons with disabilities. For example, Apple iChat video/AIM and FaceTime and Adobe Flash Player is intrinsic to the functionality of Convo Anywhere. Those "functionally similar to videophones" products are available for free but were first marketed to non-disabled people and were packaged in products that were far more useful to a larger user community than the user community served by older VRS providers. The beauty of these service/products made it possible for deaf and hard-of-hearing persons call directly to both hearing, deaf, and hard-of-hearing persons who have such products or services. For Convo, this meant only having to build an application programming interface using commercially available products and applications that made it possible for deaf and hard-of-hearing persons access the product/service to make VRS calls. And this unique "feature" would not have been possible if industry developments among competitors had not matured so that they could collaborate further without losing their market position or be restricted from pursuing other profitable opportunities as a result of that collaboration on functional features.

III. Principled Conduct and Universal Design

To go back to the initial argument regarding promulgating rules by specific criteria, regardless of whether the theme is “achievability”, “industry flexibility”, or “network features, functions, and capabilities”⁸, Convo is of the opinion that the FCC will not ever be able to fairly determine via traditional rule-making what is achievable or compatible or satisfies performance objectives by reliance on the relatively limited pool of VRS providers, much less across such a broad swath of industry providers and user groups brought together by the 2010 AA. The telecommunications access needs of a varied group of users with disabilities are still being evaluated and refinements are being introduced continually, often in piecemeal fashion. For example, VRS has two widely used compatibility standards for interoperability currently in place: Session-Initiated Protocol (SIP) and H.323. They enable much of the current functionality for VRS users, but are relegated to stand-alone proprietary devices or peripheral units. It is only recently that many personal computers have come equipped with built-in video cameras and those products work across widely available video applications such as Windows Media, Apple FaceTime, Adobe Flash and AIM iChat and those are capable of accessing VRS providers’ platforms but still are not capable of accessing other provider’s devices for point to point calling. Convo believes the industry is the best resource to address technical barriers is for the FCC to encourage an industry-wide policy of “principled conduct” that uses universal design principles to frame the collaborative relationship between providers and users. Sections 255 and 716(e) share similar objectives and a common framework, namely through the concept of universal design. Convo encourages the FCC to take a leadership role and encourage industry participants to adopt a product development approach based on principled conduct related to applying universal design principles to various shared interoperable platforms. The shared effort alone has value far beyond the individual contributions of its partners. Today, we know universal design principles are evident in daily life at a level far more prevalent than ten years ago and this is by no means unrelated to the efforts of the Commission to enable industry participants to find each other under that “principled” umbrella. The Commission has been successful simply because it

⁸ The quoted terms cover a few of the many areas sought for comments by the FCC in the 2010 AA Comments.

has allowed an independent means of working together without burdensome rules and has succeeded because it used a “principled” across-the board approach.

IV Convo Recommendations

Recent efforts by the FCC to bring together industry participants through forums that promote industry information sharing have become more meaningful as more and more companies are identifying and developing individual technologies that have promise for widespread use. Convo believes that solutions can be found if the FCC encourages or forces the creation of a working group of industry leaders to determine how to enable their video conferencing products to connect to each other.

Alternatively, Convo proposes that the FCC make more effective use of the complaints review process by making more widely available information regarding the technical problems that pose barriers to access and how those barriers are resolved or settled (or vice-versa, why they are not feasible or achievable). Furthermore, this should be made widely disseminated through FCC outreach efforts and in partnership with the International Standards Organization, the Telecommunications Industry Alliance, and through federal agencies that are part of the a public-private sector Broadband Accessibility Working Group. This is the kind of “principled” conduct that needs reinforcement from all in order for the FCC to successfully achieve across-the-board realization of the promise of the 2010 AA.

These efforts also need to be supported for relatively smaller user groups, such as persons with deaf-blindness or speech disabilities. This means making financially viable those industry efforts to experiment with newer technologies. Convo proposes that the FCC find ways to offer incentives using the Universal Service Fund for innovation grants to individual companies or collaborators interested in designing accessible features for broadband telecommunications used by persons with disabilities, including those with deaf-blindness and speech disabilities. The timing for this kind of interaction could not have been more opportune for people with disabilities and it is now the time for the Commission to abandon strategies that support

“separate but equal” equipment that enable persons with disabilities to achieve access. In order to do so, the Commission must rely on a larger audience of participants.

Convo is aware that the October 28th Comments sought more specific solutions in light of the Congressional mandate to promulgate regulations. Convo believes this can be achieved without resorting to specific individual performance objectives but by referring to more prevalently available benchmark identifiers that can be used as periodic measures of the real-world achievements of individual industry providers and collaborators. Convo proposes that the FCC craft rules that enable rather than restrict.

Convo strongly believes that the ultimate judge of success is the consumers’ feedback. The Internet is a shadow world of possibilities in which abled and disabled individuals are becoming a singular voice that will bring the light the promise of the 2101 Accessibility Act.

Respectfully submitted,



Robin Horwitz
Chief Executive Officer
Convo Communications, LLC
2603 Camino Ramon – Suite 200
San Ramon, California 94583
Email: robin@convorelay.com



Ed Bosson
Vice President of Regulatory Affairs
Convo Communications, LLC
706 FM 2325 – Suite D
Wimberley, Texas 78676
Email: ed@convorelay.com